

Title (en)  
HIGH DEFINITION THERMAL INK-JET PRINTER

Publication  
**EP 0481829 A3 19930714 (EN)**

Application  
**EP 91309723 A 19911021**

Priority  
US 60064090 A 19901019

Abstract (en)  
[origin: EP0481829A2] A thermal ink-jet printer (10) including a paper advancing mechanism (14) and a pen traversing mechanism (18) and a pen (20) is disclosed. The pen (20) includes a nozzle plate portion (22) which includes irregularly spaced columns of nozzles (24) for staggering application of inks onto the print medium (16) such that a drying time is provided between applications of differing inks to adjacent areas. The printer (10) further includes a platen heater assembly (68) as a means of fixing and drying the ink on the print medium (16), and a vacuum fan (62) and an associated plurality of platen vacuum holes (74) as a means of holding the print medium (16) in close contact with the heater plate assembly (68), thus increasing efficiency of heat transfer. The printer (10) is characterized in that it is capable of producing, at relatively high speeds on ordinary untreated paper or other print medium, a highly defined image relatively free from the problems of color bleeding, feathering, ink coalescence, and paper cockle normally associated with ink-jet printers. The primary usage of the printer (10) is in computer generated data printout applications.  
<IMAGE>

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Citation (search report)  
• [X] EP 0294793 A2 19881214 - CANON KK [JP]  
• [X] US 4933684 A 19900612 - TASAKI SHIGEMITSU [JP], et al  
• [X] PATENT ABSTRACTS OF JAPAN vol. 10, no. 189 (M-494)(2245) 3 July 1986 & JP-A-61 032 758 ( OLYMPUS OPTICAL CO LTD ) 15 February 1986  
• [X] PATENT ABSTRACTS OF JAPAN vol. 12, no. 171 (M-700)(3018) 21 May 1988 & JP-A-62 288 043 ( SEIKO EPSON CORP. ) 14 December 1987  
• [A] PATENT ABSTRACTS OF JAPAN vol. 7, no. 177 (M-233)(1322) 5 August 1983 & JP-A-58 081 168 ( FUJITSU K.K. ) 16 May 1983

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